<u>**AMENDMENT TO THE SPECIFICATION**</u>

Please add the following new paragraphs to the "Brief Description of the Drawings" after the paragraph beginning at page 2, line 17:

Fig. 6 is a flow diagram depicting an example method for controlling gain compensation over temperature and frequency variations.

Fig. 7 is a flow diagram depicting another example method for controlling gain compensation over temperature and frequency variations.

Fig. 8 is a flow diagram depicting a third example method for controlling gain compensation over temperature and frequency variations.

Please add the following new paragraphs after the paragraph beginning on page 12, line 10 and ending on page 12, line 15:

Fig. 6 is a flow diagram depicting an example method for controlling gain compensation over temperature and frequency variations. In step 600 a gain reference is determined. The gain reference is calibrated at a reference temperature and a reference frequency. At step 610, a current operating temperature is determined. At step 612, a current operating frequency is determined. At step 614, a gain variation is determined. The gain variation is a function of both the current operating temperature and the current operating frequency. At step 616, the gain reference and the gain variation are combined to generate a control signal. At step 618, the control signal is used to control a gain applied to the input signal.

Fig. 7 is a flow diagram depicting another example method for controlling gain compensation over temperature and frequency variations. In step 700 a gain reference is determined. The gain reference is calibrated at a reference temperature and a reference frequency. At step 710, a current operating temperature is determined. At step 712, a current operating frequency is determined. At step

714, a two-dimensional array of gain variation values is stored. The array includes a first dimension corresponding to temperature values and a second dimension corresponding to frequency values. At step 716, a gain variation is determined as a function of the current operating temperature and the current operating frequency using the two-dimensional array. At step 718, the gain reference and the gain variation are combined to generate a control signal. At step 720, the control signal is used to control a gain applied to the input signal.

Fig. 8 is a flow diagram depicting a third example method for controlling gain compensation over temperature and frequency variations. In step 800 a gain reference is determined. The gain reference is calibrated at a reference temperature and a reference frequency. At step 810, a current operating temperature is determined. At step 812, a current operating frequency is determined. At step 814, a two-dimensional array of gain variation values is stored. The array includes a first dimension corresponding to temperature values and a second dimension corresponding to frequency values. At step 816, a fast access vector is interpolated from the two-dimensional array using the current operating temperature. In step 818, the fast access vector is stored. In step 820, the gain variation is interpolated from the fast access vector using the current operating frequency. At step 822, the gain reference and the gain variation are combined to generate a control signal. At step 824, the control signal is used to control a gain applied to the input signal.